

## 192. Impact on Policy through Science Journalism–Evaluating SjCOOP, a Capacity Building Programme for Journalists in Africa and the Middle East

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**Abstract.** The SjCOOP-project builds the capacity of science journalists in Africa and the Middle East. It establishes peer-to-peer mentoring-relationships and also supports new national and regional associations of science journalists. In its first phase, between 2006 and 2009, the project yielded numerous outcomes which indicate that a push in the professionalization of science journalism has been achieved. The evaluation of the second phase of SjCOOP now lays an additional focus: It aims at assessing the impact which specific articles or broadcasts may have on the public agenda and on governments' decisions and policies.

**Keywords:** Media development, Journalism impact, Mentoring, Outcome mapping, Agenda setting

### Introduction

Capacity building programs for better science journalism in developing countries have in the past been generally driven by governments concerned with science literacy or institutions aiming at making sure journalists would transmit the right information regarding specific issues like AIDS, bird flu, climate change, GMOs, and countless other important issues. The means used have then been limited to either academic courses at universities or to short term training activities. In most of these activities students or journalists are trained for a short period of time on how to report on environment, health, technology and science. Evaluation of these activities and their outcomes are usually very limited, if at all existent and journalists are usually passive recipients of the training or information.

In this paper the structure and evaluation framework of SjCOOP (“science journalism cooperation”) is described, a long-term support-programme for science journalists in Africa and the Arab World. An initiative by the World Federation of Science Journalists (WFSJ) this project is managed from its headquarters in Canada in close cooperation with regional coordinators in Africa and the Arab World. It is funded by major international donor organisations: the British Department for International Development (DfID), the Canadian International Development Research Center

(IDRC), the Swedish International Development Agency and the Dutch Ministry of Foreign Affairs. Science journalists, in general, face a number of professional difficulties inside as well as outside their media organisations (Bauer/Howard 2009, Lublinski 2011). The starting point of SjCOOP is the idea that science journalists in general are willing to help, cooperate with, and support their peers worldwide (Fleury 2008). The aim of SjCOOP is to build an international network of colleagues and to enable a critical mass of science journalists overcome their problems, advance their careers, take the initiative in their own training, and take their stand in developing countries.

In order to achieve this goal a number of activities are carried out, including dedicated monitoring and evaluation. The objective here is to build a learning culture into the project and also to understand certain change-processes in the newsrooms and beyond.

SjCOOP has run a first phase from 2006 and 2009. A second phase of the project (from 2010 to 2012) has just begun. In the following past achievements as well as new plans are discussed.

### Mentoring Science Journalists

Through the SjCOOP-project 15 experienced science journalists (mentors) are linked to 60 aspiring science

journalists (mentees). While all the mentees come from developing countries, half of the participating mentors come from developed countries. All participants are divided into three regional groups: anglophone Africa, francophone Africa and the Arab World. Each group is led by a regional coordinator, coming from Nigeria, Cameroon and Lebanon respectively.

In peer-to-peer relationships each mentor-mentee-pair develops individualized plans of action for support through coaching and consultancy. Mentor and mentee discuss, face-to-face or by electronic communication, the contents of manuscripts the mentee has written. They also exchange on research strategies, questions of career advancement, networking, etc.

These relationships are supported by a number of additional activities and tools: once a year face-to-face meetings with trainings and field trips are offered. Web-based resources and networking-opportunities are supplied: a dedicated online platform for exchanges among the participants and discussion groups, and press conferences organized on skype. Also the building of international teams of reporters is encouraged: joint research and publication projects are carried out on selected topics.

Another important resource is the world's first Online Course in Science Journalism (WFSJ 2008) which has so far been translated to seven languages. It covers major practical and conceptual issues in science journalism, such as how to find and research stories, exposing false claims, how to pitch to an editor, turning crisis reporting to advantage and so forth – topics that are relevant to beginners in journalism as well as more experienced reporters and editors in all regions of the world. The authors of the course are journalists from many different countries. A large number of mentors and mentees of the SjCOOP project are involved in developing and improving the course (Clayton/Lublinski 2008).

Overall the SjCOOP project supports journalists while they stay in their normal working-environment: They keep their jobs in their newsroom, carrying out their regular duties while benefitting from the support provided by the project. Instead of being taught in an artificial training setting often by outsiders to the profession, SjCOOP-participants are helped to grow on their job by colleagues. Improving one's skills becomes part of the professional attitude, a sine qua non for a successful career in science journalism.

### **Some SjCOOP Mentoring Results**

During the first three-year phase of this project numerous outcomes have been achieved. Among them are 12 new science beats that have been established by the participants (science desks, science pages or special science broadcasts on TV or radio, and a new pan-African science magazine using mentees as correspondents). 22 mentees have won a total of 44 awards (prizes or scholarships), among them three scholarships for the prestigious Knight Science Journalism Fellowship at the Massachusetts Institute of Technology. 15 mentees have been promoted to higher positions in their own media, 18 have started to freelance internationally (WFSJ 2009).

### **Association Building**

As a second core activity the SjCOOP project helps African and Arab journalists in founding new national and regional associations of science journalists. Consultancy is given for setting up constitutions, fundraising and partnering with long-established associations of science journalists in rich countries. In the course of the first phase of SjCOOP eight new associations were formed and have all proven to be active in supporting science journalists.

SjCOOP supported associations through the partnering, or "twinning", of newly established science journalists' associations with long-established ones. One example is the twinning between the Arab Science Journalists Association which was established in December 2006—with the National Association of Science Writers in the United States, which was established in 1936. As a result of this cooperation the 7th World Conference of Science Journalists will be held between 27th and 29th June 2011 in Cairo, Egypt.

Another example is the twinning of Cameroon's science journalists' association with France's Association des journalistes scientifiques de la presse d'information. In addition, Kenya has been twinned with the Canadian Science Writers' Association, Nigeria with Germany's Science Journalists' Association, and Uganda with the Association of British Science Writers.

In its second phase SjCOOP supports these new associations by providing means for the organization of select activities such as training workshops and attending conferences.

### **Evaluation with "Outcome Mapping"**

A development project of the size of SjCOOP needs a dedicated framework for evaluation and learning. In the first phase of the project, Outcome Mapping has been used: an integrated method of planning, monitoring and

evaluation which has been specifically designed for capacity building in complex developmental settings. It provides for a participatory process that builds a culture of organizational learning and evaluative thinking into a project (Earl/Carden/Smutylo 2001).

The main focus of Outcome Mapping is to measure changes in the behaviour of people and organisations with which a development initiative works with most closely. So according to this approach it is not enough to create information, disseminate it and raise awareness. It is the action people take that counts; in other words behavioural change that can be observed through a monitoring and evaluation process. These measured “outcomes” of the project’s partners are considered to be a guiding “map” in the complex, changing and at least partially unknown territory the project team chooses to be active in.

In the case of SjCOOP, the project team works with three groups of beneficiaries (“boundary partners”): the mentors, the mentees and the national associations of science journalists. Long lists of actions or behavioural changes (“progress markers”) were suggested, revised and adapted several times. In the case of the mentees, for example, the project works with some 20 “progress markers”, which include a wide range of outcomes indicating that a certain change process is actually happening, e.g. “finding a way to regularly access the internet”, “improving their writing skills with the help of the mentor”, “applying for journalism awards”, “creating science beats or new science media”.

A selection of these “progress markers” was being monitored during the first phase using a number of different methods: mentees were interviewed on the phone, mentors filled in questionnaires regularly on their work and the progress of their mentees. The content of the mentee’s articles/broadcasts were evaluated by external journalists. Also editors-in-chief were interviewed by evaluators as well as the scientists or experts the mentees had interacted with. It is through the combination of these methods that the project team is able to understand data, learn where the difficulties of the project are and take decisions based on insights from different angles (El-Awady/Lublinski 2008).

### **Evaluation with “Logframes”**

The evaluation framework of the second three-year phase of SjCOOP, which started in 2010, is now combining the methodologies of “Outcome Mapping” and “Logframe Analysis”. The idea here is to use and maintain the processes and results of the first phase while at the same time better meeting the donors’ requirements for rigor and accountability in evaluation. It turned out that having gone through a creative and flexible first phase was very useful for defining a complex logical framework matrix. Here the theory of change is described by a set of levels that describe possible outcomes and impacts of the intervention on different levels. Having built the project with Outcome Mapping made it easy to find meaningful logframe indicators to be measured in the second phase.

In addition to this new framework some new Outcome Mapping elements are developed: Each mentor-mentee pair is encouraged to develop their customized mentoring plan by defining individual “progress markers”. Also for the new associations of science journalists new, individualized plans of action and outcomes are being set up.

Overall this new synthesized framework brings the opportunity of evaluating the process as well as the results of SjCOOP in a participatory, flexible and yet scientific way, based on a testable theory of change, as described theoretically by Roduner/Schläppi/Egli (2008).

New monitoring activities which are carried out in the second phase include (on top of the ones described above in section 5.): analysis of the opportunities for science journalism in the media the mentees work, assessment of the professional level of mentors and mentees as well as gender mainstreaming.

On top of this, two new evaluation activities are under way which are especially demanding: The quality of the mentee’s articles and broadcasts will be assessed through scientific content analysis and the impact of specific stories/articles on the public agenda and on the change of policies will be assessed in a limited number of cases. These two elements require their own communication research projects which will be outlined below.

### **Measuring journalistic quality**

In the second phase of SjCOOP the articles and broadcasts produced by the mentees will be evaluated at various times in the course of the project. This assessment should reveal progress in terms of journalistic quality. In order to discover reasons for this progress, data on interfering variables (e.g. training, the editorial environment and structure of the newsroom, media freedom) will be compiled.

The judgements on the journalistic quality will be made on the basis of quantitative and qualitative content analysis of manuscripts, a method previously established through the evaluation of other media development projects (Spurk/Keel/Lopata 2010). In order to account for the counterfactual also manuscripts written by journalists who had applied to be SjCOOP-mentees but have not been selected will be analyzed also.

As a basis for this evaluation a quality criteria catalogue has been established at the outset of the second phase of

the project. The idea here is to decompose the general notion of quality into smaller units, i.e. quality criteria. Although many quality criteria may be overlapping or differ according to media genre, target group or editorial preferences there are some core fundamental quality criteria for journalism that can be agreed upon.

The quality catalogue for the evaluation of SjCOOP has been assembled from three sources: 1. guide-lined interviews with the mentors, 2. an analysis of the Online Course in Science Journalism and, 3. a review of the literature on quality in journalism and science journalism (Blum/Knudson 1997, Arnold 2008, Hettwer et al. 2008, Brake/ Weitkamp 2010, to mention only a few authors here.).

The interviews yielded a good consensus among the mentors on the following criteria for journalistic quality (which were in accordance with the online course and can also be found in the literature): diversity of sources, diversity of viewpoints, adding background to a story, correctness of information, citizens as main obligation for reporters, audience adequate writing style and the use of other 'transformation' techniques to improve the comprehensibility of an article or broadcast. This catalogue has been agreed upon by the mentors as well as the SjCOOP-staff and will be used as the basis for the evaluations to be carried out in the course of the project.

## Impact Stories

In the first phase of SjCOOP we saw the production of a small number of journalistic stories in news media which led to societal dialogue and in some cases government decisions in developing countries. Three examples shall be given here:

A mentee from Cote d'Ivoire published a dossier on the reintegration of people who have been displaced by war and lack psychological support. In doing so he stirred discussions in his country, the ministry of war victims contacted him to let him know they were lacking money to carry out the plan of action they had originally intended to follow.

Another mentee's article published in a major daily newspaper in Uganda focused on expired anti-retroviral (ARV) drugs distributed by government stores and leading to death. As a consequence of this journalist's report the director of the ARV distribution scheme lost his job.

A mentee from Cameroon led a team of journalists that highlighted the lack of progress in extracting the carbon dioxide gas accumulating in infamous Lake Nyos. The reporting was instrumental in triggering the implementation of remedial measures.

So far these and other cases have provided anecdotal evidence for societal change processes in which science journalists played an important role. Yet, they have not been studied or evaluated in detail. These results were unintended outcomes: the project, in its first phase, was not directly aiming at achieving them.

In its second phase, the SjCOOP project will lay a main focus on these «impact stories» both in its programme management as well as in the accompanying evaluation and research activities. In a few selected cases we will try to understand the influence certain science journalism stories have on public discussions, attitudes of the general public and the reactions by public policy in terms of policy change.

The anecdotal cases reported in the first phase of SjCOOP nicely fit in the three varieties of policy effects identified by Protes (1991): deliberative results (debate on war victims), individualistic results (firing of AIDS drug officer), and substantive reforms (lake Nyos). Further research is needed to add to and describe these cases in detail.

## Conclusions

A true push in the professionalization of science journalists in Africa and the Arab World has been achieved through the first phase of the SjCOOP project. The blending of different activities on different levels (face-to-face meetings, individual mentoring, reporting teams, association building, use of dedicated tools on the internet) has led to numerous outcomes that show the progress of the projects' participants and science journalism in general. This progress is being achieved while the supported journalists stay on their job: they are trained «in situ».

This project can also serve as an example for the synthesis of the Outcome Mapping and Logframe Analysis approaches for evaluation. In order to plan, monitor and evaluate this complex capacity-building project a combination of management and evaluation tools for development as well as communication research is needed. This holds especially true when it comes to studying the impact some dedicated science journalistic stories may have. The results, we hope, may lead to new approaches in evaluations of media development projects as well as research uptake programmes.

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